### SBIR/STTR

#### **General Program Info**

The Small Business Innovation Research (SBIR) program was created by the Small Business Innovation Development Act of 1982 (P.L. 97-219), reauthorized until September 30, 2000 by the Small Business Research and Development Enhancement Act (P.L. 102-564), and reauthorized again until September 30, 2008 by the Small Business Reauthorization Act of 2000 (P.L. 106-554).

The STTR program was created by Title II of the Small Business Research and Development Enhancement Act of 1992 (P.L. 102-564), reauthorized until the year 2001 by the Small Business Reauthorization Act of 1997 (P.L. 105-135), and reauthorized again until September 30, 2009, by the Small Business Technology Transfer Program Reauthorization Act of 2001 (P.L. 107-50).

## Federal Requirements

 Federal agencies with extramural R&D budgets over \$100 million were required to establish an SBIR program using a set-aside of a stated percentage of that budget.

 The percentage grew from an initial 0.2% in Fiscal Year (FY) 1983 to the maximum of 2.5% in FY 1997.

# Atmospheric Measurement Technology (Topic 6)

- a. Optical Methods for Ultra-Sensitive Trace Gas Measurements
- b. DIAL Water Vapor Profiling System
- c. High Accuracy Absolute Measurement of Infrared Radiation at the Surface
- d. Instrumentation for Characterizing Organic Substances in Aerosol Particles

## Recent DOE SBIR/STTR Solicitation

Solicitation <u>SBIR</u> <u>STTR</u>

Release Date October 15, 2002

Closing Date January 14, 2003

Award Selection May 16, 2003

FY 2002 Budget \$94M(2.5%) \$5.6M(0.15%)

FY 2002 Awards

Phase I 231(\$100K) 18(\$100K)

Phase II 100(\$750K) 11(\$500K)

### BER SBIR/STTR

 David Thomassen, BER SBIR/STTR Coordinator

- LSD: Marvin Stodolsky
- MSD: "PC" Srivastava
- CCRD: Rickey Petty
- ERSD: Brendlyn Faison

#### 6. ATMOSPHERIC MEASUREMENT TECHNOLOGY

#### a. Optical Methods for Ultra-Sensitive Trace Gas Measurements

CO, ethene, acetylene, NO, NO<sub>2</sub>, NO<sub>3</sub>, nitric acid, formaldehyde, acetaldehyde, sulfur dioxide, nitrous acid, nitrous oxide, isoprene, methacrolein, methyl vinyl ketone, methyl nitrate, hydrogen peroxide, peroxyacetyl nitrate, methyl hydroperoxide, and peracetic acid.

#### b. DIAL Water Vapor Profiling System

#### c. High Accuracy Absolute Measurement of Infrared Radiation at the Surface

#### d. Instrumentation for Characterizing Organic Substances in Aerosol Particles

Grant applications are sought to develop instrumentation for real-time measurements that will: (1) provide accurate estimates of both mass and speciation of organic matter as a function of particle size; (2) detect the changing degree of oxygenation of the organics in aerosols, in order to evaluate the photochemical evolution of the organic aerosol; or (3) identify isotopic and molecular-level tracers of primary and secondary organic carbon, in order to help understand the origins of the fine particulate matter.

## SBIR/STTR Contact Information

 For information concerning SBIR contact: SBIR Program Office (301) 903-1414

sbir-sttr@science.doe.gov http://sbir.er.doe.gov/sbir/#T6